



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,586	08/01/2001	Regis Vaillant	14XZ00100	5994

7590

11/30/2005

Jay L. Chaskin  
General Electric Company  
3135 Easton Turnpike  
Fairfield, CT 06431-0001

EXAMINER

SHERALI, ISHRAT I

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/920,586	VAILLANT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sherali Ishrat	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/01/2001</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### **Drawings**

1. Drawings are objected to under 37 CFR 1.83 because drawings do not illustrate any of the features of claims 5-15. The drawings must show each and every feature of the claim. Such as "device" for reconstruction of dynamic three dimensional image, computer program embodied in computer readable medium implementing the method of reconstruction of dynamic three dimensional image. Proper correction is required.

### **Claim Rejections - 35 USC § 101**

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 10-15 are rejected under 35 USC § 101 as being non-statutory.

Regarding claim 10, claim recite in lines 1-2 computer program comprising program code employing the method in claim 1. Claim 10 is non-statutory because claim does not define a computer readable medium. The examiner suggest amending the claim to embody the program on "computer readable medium" in order to make the claim statutory.

Regarding claim 11, claim recite in lines 1-2 computer program comprising program code employing the method in claim 2. Claim 11 is non-statutory because claim does not define a computer readable medium. The examiner suggest amending

Art Unit: 2621

the claim to embody the program on "computer readable medium" in order to make the claim statutory.

Regarding claim 12, claim recite in lines 1-2 computer program comprising program code employing the method in claim 3. Claim 12 is non-statutory because claim does not define a computer readable medium. The examiner suggest amending the claim to embody the program on "computer readable medium" in order to make the claim statutory.

Regarding claim 13, claim in lines 1-2 recites support capable of being read by a processor and containing a program code means that can apply the method as defined in claim 1. Claim 13 is non-statutory because "support" is non-statutory. Claim should recite computer readable medium. However claim 10 is suggested to recite computer readable medium therefore examiner suggest to cancel claim 13.

Regarding claim 14, claim in lines 1-2 recites support capable of being read by a processor and containing a program code means that can apply the method as defined in claim 2. Claim 14 is non-statutory because "support" is non-statutory. Claim should recite computer readable medium. However claim 11 is suggested to recite computer readable medium therefore examiner suggest to cancel claim 14.

Regarding claim 15, claim in lines 1-2 recites support capable of being read by a processor and containing a program code means that can apply the method as defined in claim 3. Claim 15 is non-statutory because "support" is non-statutory. Claim should recite computer readable medium. However claim 12 is suggested to recite computer readable medium therefore examiner suggest to cancel claim 15.

## **Claim Rejections - 35 USC § 112**

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 5-15 are rejected under 35 USC 112 as being failing to comply with enablement and written description requirement.

Claims 5-15 claims device and computer program for implementing the method for reconstructing dynamic three dimensional image. However specification fails to disclose or suggest device and computer program embodied in a computer readable medium for implementing the method for reconstructing dynamic three dimensional image.

## **Claim Rejections - 35 USC § 112**

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7-9 are rejected under 35 USC § 112 as being indefinite.

Regarding claims 7, claim recite in line 1 "The device for use of the method according to claim 1". Claim 1 is a method claim and therefore claim 7 is indefinite and improper hybrid claim because claim 7 is claiming device. Claims 5-6 are device claims therefore examiner suggest canceling claim.7. Proper correction is required.

Regarding claims 8, claim recite in line 1 "The device for use of the method according to claim 2". Claim 2 is a method claim and therefore claim 8 is indefinite and

Art Unit: 2621

improper hybrid claim because claim 7 is claiming device. Claims 5-6 are device claims therefore examiner suggest canceling claim 8. Proper correction is required.

Regarding claims 9, claim recite in line 1 "The device for use of the method according to claim 3". Claim 3 is a method claim and therefore claim 9 is indefinite and improper hybrid claim because claim 9 is claiming device. Claims 5-6 are device claims therefore examiner suggest canceling claim 9. Proper correction is required.

### **Allowable Subject Matter**

8. Claims 1-4 are allowable over prior art of record.

9. The following is an examiner's statement of reasons for allowance of claims 1-4:

The present invention a method for reconstruction of a dynamic three-dimensional image of an object covered by contrast medium. Independent claim 1 identify the distinct feature "reconstructing the dynamic three-dimensional image of the object from each static two-dimensional image of second set and reconstructed static three dimensional image". The closest prior art to Wang (US 5,827,187), Kupfer et al. (US 5,287,273), Simonetti (US 6,073, 042) and Carroll et al. (WO 00/37957) show reconstruction of a dynamic three- dimensional image of an object covered by contrast medium but fail to anticipate or render the above limitation obvious when taken singularly or in combination.

Art Unit: 2621

## Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherali Ishrat whose telephone number is 571-272-7398. The examiner can normally be reached on 8:00 AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ishrat Sherali

Patent Examiner

Group Art Unit 2621

November 20, 2005



**ISHRAT SHERALI**  
**PATENT EXAMINER**  
**ARTUNIT 2621**